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EXAMINER

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,197

Applicant(s)

INAGAKI, ATSUSHI

Examiner

Justin P Misleh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 17 is/are rejected.
- 7) ☒ Claim(s) 2.5 and 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. **It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.** The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

More specifically, the abstract is longer than 150 words and contains the legal phraseology "comprising".

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The disclosure is objected to because of the following informalities: inconsistent with the remainder of the specification. More specifically, page 8 (line 21), therein, "reference numeral denotes an image display". In maintaining consistency with the

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remainder of the specification, the Examiner suggests the Applicant insert the appropriate numeral, such as "reference number 28 denotes an image display".

Appropriate correction is required.

Claim Objections

4. **Claims 2, 5, and 9** are objected to because of the following informalities:
inconsistent with parent claim.

Claim 5 states, "display designation unit" when parent Claim 1 states, "display designating unit".

Claims 2 and 9 state, "said display screen" when respective parent Claims 1 and 8 do not introduce a display screen.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1 – 6, 8 – 13, and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Miyawaki et al (EP 650 292 A1).

7. For **Claim 1**, Miyawaki et al. disclose, as shown in figures 8 – 10 and as stated in column 11 (line 45) – column 15 (line 34), an image sensing apparatus, comprising:

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an image sensor (101) that senses an image of a subject to obtain an image signal (An exemplary “image of a subject” is shown in figure 10a; herein “said sensed image” refers to figure 10a);

an image display device (109) that is capable of displaying a sensed image based on said image signal obtained by said image sensor (the capability of the image display device is, at least, described, in column 12, lines 23 – 32);

a display designating unit (110) that designates whether or not said sensed image (figure 10a) is displayed by said image display device (109) when the image of the subject is sensed by said image sensor (As stated in columns 13, lines 47 – 58, and 14, lines 1 – 4, said display designating unit, 110, does not designate until an image is sensed by said image sensor, 101); and

a focus evaluating value obtaining device (130 and 131) that obtains a focus evaluating value (“high frequency component”; see column 13, lines 24 – 42) for adjusting a focus based on said image signal obtained by said image sensor (101; As shown in figure 8, the image signal is passed to blocks 130 and 102.), said focus evaluating value obtaining device (130 and 131) obtaining said focus evaluating value (“high frequency component”) based on an image signal which is obtained by said image sensor (101) and corresponds to a part of a region of an display image displayed by said image display device (Area 6 is isolated, enlarged, solely displayed, and then automatically focused; see sequence of figures 10d and 10e and columns 12, lines 40 – 58, 13, lines 1 – 46), if said display designating unit (110) does not designate (figure 10d) that said sensed image is displayed by said image display device when the image of the subject is sensed by said image sensor (see explanation below).

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As stated above, "said sensed image" corresponds to the image shown in figure 10(a), because figure 10(a) shows the whole scene captured by the image sensor (101). On the other hand, figure 10(e) represents an enlarged portion of "said sensed image" and is not considered to be the "said sensed image" because, figure 10(e) shows only 1/6 of the scene captured by the image sensor (101).

Therefore, the display designating unit (110) designates that "said sensed image" is displayed by image display device (109), when only the whole scene captured by the image sensor (101) is displayed on the image display device (109), as shown in figure 10(a), and the display designating unit (110) does NOT designate that "said sensed image" is displayed by image display device (109), when only 1/6 of the scene captured by the image sensor (101) is displayed on the image display device (109), as shown in figure 10(e).

As claimed, the focus evaluating value obtaining device (130 and 131) obtains a focus evaluating value ("high frequency component") based on an image signal which is obtained by said image sensor (101) and corresponds to a part of a region (1/6 of the captured scene) of an display image displayed by said image display device (figure 10e) when said display designating unit (110) designates that the said sensed image (figure 10a) is NOT displayed (figure 10e is displayed and upon which auto-focusing is performed) by said image display device (109). Furthermore, as stated above, said display designating unit (110) does not designate until an image is sensed by said image sensor (101).

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8. For **Claim 8**, Miyawaki et al. disclose, as shown in figures 8 – 10 and as stated in column 11 (line 45) – column 15 (line 34), a control method of an image sensing apparatus, comprising:

an image sensing step (101) that senses an image of a subject to obtain an image signal (An exemplary “image of a subject” is shown in figure 10a; herein “said sensed image” refers to figure 10a);

an image displaying step (109) that is capable of displaying a sensed image based on said image signal obtained by said image sensing step (the capability of the image displaying step is, at least, described, in column 12, lines 23 – 32);

a display designating step (110) that designates whether or not said sensed image (figure 10a) is displayed by said image displaying step (109) when the image of the subject is sensed by said image sensing step (As stated in columns 13, lines 47 – 58, and 14, lines 1 – 4, said display designating step, 110, does not designate until an image is sensed by said image sensing step, 101); and

a focus evaluating value obtaining step (130 and 131) that obtains a focus evaluating value (“high frequency component”; see column 13, lines 24 – 42) for adjusting a focus based on said image signal obtained by said image sensing step (101; As shown in figure 8, the image signal is passed to blocks 130 and 102.), said focus evaluating value obtaining step (130 and 131) obtaining said focus evaluating value (“high frequency component”) based on an image signal which is obtained by said image sensing step (101) and corresponds to a part of a region of an display image displayed by said image displaying step (Area 6 is isolated, enlarged, solely displayed, and then automatically focused; see sequence of figures 10d and 10e and columns 12, lines 40 –

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58, 13, lines 1 – 46), if said display designating step (110) does not designate (figure 10d) that said sensed image is displayed by said image displaying step when the image of the subject is sensed by said image sensing step (see explanation below).

As stated above, “said sensed image” corresponds to the image shown in figure 10(a), because figure 10(a) shows the whole scene captured by the image sensing step (101). On the other hand, figure 10(e) represents an enlarged portion of “said sensed image” and is not considered to be the “said sensed image” because, figure 10(e) shows only 1/6 of the scene captured by the image sensing step (101).

Therefore, the display designating step (110) designates that “said sensed image” is displayed by image displaying step (109), when only the whole scene captured by the image sensing step (101) is displayed in the image displaying step (109), as shown in figure 10(a), and the display designating step (110) does NOT designate that “said sensed image” is displayed by image displaying step (109), when only 1/6 of the scene captured by the image sensing step (101) is displayed in the image displaying step (109), as shown in figure 10(e).

As claimed, the focus evaluating value obtaining step (130 and 131) obtains a focus evaluating value (“high frequency component”) based on an image signal which is obtained by said image sensing step (101) and corresponds to a part of a region (1/6 of the captured scene) of an display image displayed by said image displaying step (figure 10e) when said display designating step (110) designates that the said sensed image (figure 10a) is NOT displayed (figure 10e is displayed and upon which auto-focusing is performed) by said image displaying step (109). Furthermore, as stated

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above, said display designating step (110) does not designate until an image is sensed by said image sensing step (101).

9. As for **Claims 2 and 9** (please see objections above), Miyawaki et al. disclose, as shown in figure 10, wherein said part of the region (Area 6) of said display screen includes a focusing signed detecting area set in advance (the focusing regions are predetermined).

10. As for **Claims 3 and 10**, as stated above, "said sensed image" corresponds to the image shown in figure 10(a), because figure 10(a) shows the whole scene captured by the image sensor/sensing step (101), and, on the other hand, figure 10(e) represents an enlarged portion of "said sensed image" and is not considered to be the "said sensed image" because, figure 10(e) shows only 1/6 of the scene captured by the image sensor/sensing step (101).

The display designating unit/step (110) designates that "said sensed image" is displayed by image display device/displaying step (109), when only the whole scene captured by the image sensor/sensing step (101) is displayed in the image display device/displaying step (109), as shown in figure 10(a), and the display designating step (110) does NOT designate that "said sensed image" is displayed by image display device/displaying step (109), when only 1/6 of the scene captured by the image sensing step (101) is displayed in the image display device/displaying step (109), as shown in figure 10(e).

In regards to the claim language, said focus evaluating value obtaining device/step (130 and 131) obtains said focus evaluating value ("high frequency component") corresponding to substantially the entire region ("fixed AF area of a predetermined size")

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of an display image displayed by said display device/displaying step (109), if said display designation unit/step designates that said sensed image (figure 10a) is displayed by said image display device/displaying step (109), as stated in column 14 (lines 33 – 36). Since, the focus evaluating value is determined for displayed image of figure 10(a) and not of figure 10(e), the focus evaluating value corresponds to substantially the entire region.

11. As for **Claims 4 and 11**, Miyawaki et al. disclose, as shown in figure 8 and as stated in column 13 (lines 24 – 42), wherein said focus evaluating value (“high frequency component”) is obtained based on a high frequency component of an image signal obtained by said image sensor/sensing step (101).

12. As for **Claims 5** (please see objection above) **and 12**, as stated above, “said sensed image” corresponds to the image shown in figure 10(a), because figure 10(a) shows the whole scene captured by the image sensor/sensing step (101), and, on the other hand, figure 10(e) represents an enlarged portion of “said sensed image” and is not considered to be the “said sensed image” because, figure 10(e) shows only 1/6 of the scene captured by the image sensor/sensing step (101).

The display designating unit/step (110) designates that “said sensed image” is displayed by image display device/displaying step (109), when only the whole scene captured by the image sensor/sensing step (101) is displayed in the image display device/displaying step (109), as shown in figure 10(a), and the display designating step (110) does NOT designate that “said sensed image” is displayed by image display device/displaying step (109), when only 1/6 of the scene captured by the image sensing step (101) is displayed in the image display device/displaying step (109), as shown in figure 10(e).

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In regards to the claim language, when the display designating unit/step (110) does NOT designate (corresponding to figure 10e) that said sensed image (figure 10a) is displayed, the display designating unit/step (110) prohibits display of said sensed image (figure 10a) at least until auto-focusing is complete.

13. As for **Claims 6 and 13**, Miyawaki et al. disclose, as shown in figure 8, a focus adjusting device/step that adjusts a focus (by means of 132) based on said focus evaluating value (“high frequency component”) obtained by said focus evaluating value obtaining device/step (130 and 131).

14. For **Claim 17**, Miyawaki et al. disclose, as shown in figures 8 – 10 and as stated in column 11 (line 45) – column 15 (line 34), an image sensing apparatus, comprising:

an image sensor (101) for sensing an image of a subject to output an image signal (An exemplary “image of a subject” is shown in figure 10a; herein “said sensed image” refers to figure 10a);

a display (109) for displaying a sensed image based on said image signal;

a designation unit (110) for designating whether or not said sensed image (figure 10a) is displayed by said display (109) when the image of the subject is sensed by said image sensor (As stated in columns 13, lines 47 – 58, and 14, lines 1 – 4, said display designating unit, 110, does not designate until an image is sensed by said image sensor, 101); and

a calculation unit (130 and 131) for calculating a focus evaluating value (“high frequency component”; see column 13, lines 24 – 42) for focus adjustment based on said image signal,

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wherein said calculation unit (130 and 131) calculates said focus evaluating value (“high frequency component”) based on a part of said image signal (Area 6 is isolated, enlarged, solely displayed, and then automatically focused; see sequence of figures 10d and 10e and columns 12, lines 40 – 58, 13, lines 1 – 46), if said designation unit (110) designates not to display (figure 10d) said sensed image (see explanation below).

As stated above, “said sensed image” corresponds to the image shown in figure 10(a), because figure 10(a) shows the whole scene captured by the image sensor (101). On the other hand, figure 10(e) represents an enlarged portion of “said sensed image” and is not considered to be the “said sensed image” because, figure 10(e) shows only 1/6 of the scene captured by the image sensor (101).

Therefore, the designation unit (110) designates that “said sensed image” is displayed by the display (109), when only the whole scene captured by the image sensor (101) is displayed on the display (109), as shown in figure 10(a), and the designation unit (110) does NOT designate that “said sensed image” is displayed by the display (109), when only 1/6 of the scene captured by the image sensor (101) is displayed on the display (109), as shown in figure 10(e).

As claimed, the calculation unit (130 and 131) calculates a focus evaluating value (“high frequency component”) based on a part of said image signal (1/6 of the captured scene; figure 10e) when said designation unit (110) designates that the said sensed image (figure 10a) is NOT displayed (figure 10e is displayed and upon which auto-focusing is performed) by said display (109).

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Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 7 and 14 – 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyawaki et al.

17. For **Claim 15**, Miyawaki et al. disclose, as shown in figures 8 – 10 and as stated in column 11 (line 45) – column 15 (line 34), a control method of an image sensing apparatus, comprising:

an image sensing step (101) that senses an image of a subject to obtain an image signal (An exemplary “image of a subject” is shown in figure 10a; herein “said sensed image” refers to figure 10a);

an image displaying step (109) that is capable of displaying a sensed image based on said image signal obtained by said image sensing step (the capability of the image displaying step is, at least, described, in column 12, lines 23 – 32);

a display designating step (110) that designates whether or not said sensed image (figure 10a) is displayed by said image displaying step (109) when the image of the subject is sensed by said image sensing step (As stated in columns 13, lines 47 – 58, and 14, lines 1 – 4, said display designating step, 110, does not designate until an image is sensed by said image sensing step, 101); and

a focus evaluating value obtaining step (130 and 131) that obtains a focus evaluating value (“high frequency component”; see column 13, lines 24 – 42) for

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adjusting a focus based on said image signal obtained by said image sensing step (101; As shown in figure 8, the image signal is passed to blocks 130 and 102.), said focus evaluating value obtaining step (130 and 131) obtaining said focus evaluating value (“high frequency component”) based on an image signal which is obtained by said image sensing step (101) and corresponds to a part of a region of an display image displayed by said image displaying step (Area 6 is isolated, enlarged, solely displayed, and then automatically focused; see sequence of figures 10d and 10e and columns 12, lines 40 – 58, 13, lines 1 – 46), if said display designating step (110) does not designate (figure 10d) that said sensed image is displayed by said image displaying step when the image of the subject is sensed by said image sensing step (see explanation below).

As stated above, “said sensed image” corresponds to the image shown in figure 10(a), because figure 10(a) shows the whole scene captured by the image sensing step (101). On the other hand, figure 10(e) represents an enlarged portion of “said sensed image” and is not considered to be the “said sensed image” because, figure 10(e) shows only 1/6 of the scene captured by the image sensing step (101).

Therefore, the display designating step (110) designates that “said sensed image” is displayed by image displaying step (109), when only the whole scene captured by the image sensing step (101) is displayed in the image displaying step (109), as shown in figure 10(a), and the display designating step (110) does NOT designate that “said sensed image” is displayed by image displaying step (109), when only 1/6 of the scene captured by the image sensing step (101) is displayed in the image displaying step (109), as shown in figure 10(e).

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As claimed, the focus evaluating value obtaining step (130 and 131) obtains a focus evaluating value (“high frequency component”) based on an image signal which is obtained by said image sensing step (101) and corresponds to a part of a region (1/6 of the captured scene) of an display image displayed by said image displaying step (figure 10e) when said display designating step (110) designates that the said sensed image (figure 10a) is NOT displayed (figure 10e is displayed and upon which auto-focusing is performed) by said image displaying step (109). Furthermore, as stated above, said display designating step (110) does not designate until an image is sensed by said image sensing step (101).

However, Miyawaki et al. do not disclose a storage medium in which a control program of an image sensing apparatus for performing the above steps is stored. **Official Notice** that both concepts and the advantages of providing a storage medium in which a control program of an image sensing apparatus for performing the above steps is stored are well known and expected in the art as a means to provide a readily upgradeable method of operation.

18. As for **Claim 16**, as stated above, “said sensed image” corresponds to the image shown in figure 10(a), because figure 10(a) shows the whole scene captured by the image sensor/sensing step (101), and, on the other hand, figure 10(e) represents an enlarged portion of “said sensed image” and is not considered to be the “said sensed image” because, figure 10(e) shows only 1/6 of the scene captured by the image sensor/sensing step (101).

The display designating unit/step (110) designates that “said sensed image” is displayed by image display device/displaying step (109), when only the whole scene

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captured by the image sensor/sensing step (101) is displayed in the image display device/displaying step (109), as shown in figure 10(a), and the display designating step (110) does NOT designate that “said sensed image” is displayed by image display device/displaying step (109), when only 1/6 of the scene captured by the image sensing step (101) is displayed in the image display device/displaying step (109), as shown in figure 10(e).

In regards to the claim language, said focus evaluating value obtaining device/step (130 and 131) obtains said focus evaluating value (“high frequency component”) corresponding to substantially the entire region (“fixed AF area of a predetermined size”) of an display image displayed by said display device/displaying step (109), if said display designation unit/step designates that said sensed image (figure 10a) is displayed by said image display device/displaying step (109), as stated in column 14 (lines 33 – 36). Since, the focus evaluating value is determined for displayed image of figure 10(a) and not of figure 10(e), the focus evaluating value corresponds to substantially the entire region.

19. As for **Claims 7 and 14**, Miyawaki et al. disclose a display designating unit (110) that designates whether or not said sensed image (figure 10a) is displayed by said image display device (109) when the image of the subject is sensed by said image sensor (As stated in columns 13, lines 47 – 58, and 14, lines 1 – 4, said display designating unit, 110, does not designate until an image is sensed by said image sensor, 101) that is implemented in hardware.

However, Miyawaki et al. do not disclose wherein designation by said display designation unit/step is stored in a memory as an image display flag. **Official Notice** that both concepts and the advantages of providing wherein designation by said display

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designation unit/step is stored in a memory as an image display flag are well known and expected in the art as a means to provide a readily upgradeable method of operation.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:30 PM and on alternating Fridays from 7:30 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
August 6, 2004


TUAN HO
PRIMARY EXAMINER